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ABSTRACT

The emphasis of this guideline is on determining modular figures for the three main facets of the library program: (1) acquisition of library resources, (2) technical processing of those resources and (3) services to the public using those resources. The system includes the following components: (1) A Library Resources Formula which takes into account both enrollment and program factors and is similar to the approach developed by Clapp and Jordan; (2) Staffing formulas which relate public service staff to the demands for service and the technical processes staff to the materials which require processing and which compare the Washington libraries to those in the University of California System; (3) A minimum percentage increase factor for acquisitions and, for formula purposes, a maximum percentage limitation on weeding; (4) Procedures for converting resource and manpower requirements into dollars which allow for changing market conditions; and (5) Procedures for computing binding and other operational costs. The proposed system relates closely to the long range planning process since it enables each institution to estimate its requirements for future library resources and staffing once the factors of student enrollment, faculty staffing and graduate programs have been determined for any given year. (Author/NH)

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A MODEL BUDGET ANALYSIS SYSTEM

FOR PROGRAM 05

LIBRARIES

Prepared by

The Interinstitutional Committee of Business Officers

University of Washington
Washington State University
Eastern Washington State College
Central Washington State College
Western Washington State College
The Evergreen State College

March, 1970

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A MODEL BUDGET ANALYSIS SYSTEM FOR PROGRAM 05--LIBRARIES

I. Summary of Agreements

A. The analysis system covers all aspects of Program 05 with the following exceptions: collections, staffing and expense related to laboratory school libraries at Eastern and Central Washington State Colleges; the Law and Health Sciences libraries at the University of Washington; Agricultural and Industrial Research libraries at Washington State University; audio-visual programs, curriculum laboratories, closed-circuit television, organized and serviced map collections and those aspects of an archives which deal solely with an institution's history, organized collections of personal or official papers or records management. In addition, nonrecurring conversion programs, self-sustaining activities and nonlibrary functions are excluded.

B. The following formula shall be used for determining minimum quantitative adequacy of holdings of library resources:

1.	Basic or Opening Day Collection	85,000 Units of Library Resources*
2.	Allowance per F.T.E. Faculty*	100 Units of Library Resources
3.	Allowance per F.T.E. Student	15 Units of Library Resources
4.	Allowance per Masters Field* When No Doctorate Offered in Field	6,100 Units of Library Resources
5.	Allowance per Masters Field* When Doctorate Is Offered in Field	3,050 Units of Library Resources
6.	Allowance per Doctoral Field*	24,500 Units of Library Resources

C. A minimum number of acquisitions per year shall be established equal to five per cent of the estimated number of units of library resources held at the start of each fiscal year.

D. Anticipated deletions from the collection shall be based on the percentage ratio of deletions to total holdings experienced in the most recent actual year up to a maximum of three per cent per year.

E. The following formulas for determining total man years of staffing shall be used in the analysis system:

1. Public Services (Including a pro rata share of library administration)
   Using the revised definition of f.t.e. students, weight
   100/200 level f.t.e. students at 1.00
   300/400 level f.t.e. students at 1.80
   500 level f.t.e. students at 4.30
   600/700 level f.t.e. students at 6.00
   Registered outside users* at 1.00

   Determine the total weighted enrollment and divide by a factor of 220 to derive F.T.E. Formula Public Services Staff.

*See Section V, Definitions.

2. Technical Processes Staff (Including a pro rata share of library administration).

Add the number of units of library resources estimated to be added in the year to which the calculation applies, to the total units held at the beginning of that year plus the number of units estimated to be deleted. Multiply that figure by the units to be added and deleted and divide by 1,000,000 to derive "Weighted Units to be Processed." Multiply the Weighted Units to be Processed by the following factors and add the following constants:

1 to 14,999 WUP	Multiply by .01514	and add	67
15,000 to 41,999 WUP	Multiply by .00664	and add	194
42,000 to 300,000 WUP	Multiply by .00360	and add	322

Divide the Weighted Units to be Processed by the factor resulting from the above calculation to derive F.T.E. Formula Technical Processes Staff.

3. All staffing comparisons are to be made in terms of the total f.t.e. staff generated by the above formulas.

F. When computing the man years of work-study student workers, only the man years attributable to the nonfederal portion of their cost shall be included for formula purposes.

G. The unit acquisition cost of library materials shall be computed on the basis of each institution's actual experience in the most recent fiscal year plus anticipated price increases based on national price trend data.

H. Continuing binding expenditures shall be estimated on the basis of the experienced relationship of binding to subscriptions as extended by the experienced unit cost of binding after adjustment for the same level of price increases as are assumed in Program 06.

I. Staffing costs shall be determined on the basis of average man year costs as budgeted for the second year of the biennium as adjusted for requested percentage increases in salary and wage levels.

J. Other operations costs shall be computed on the basis of budgeted expenditures per man year as of the current biennium as adjusted for the same level of price increases as are assumed in Program 06.

II. Introduction

The college and university library program has proven to be one of the most difficult to evaluate, in quantitative terms, in the budgeting process. Most leading authorities, including accrediting agencies, agree that the "adequacy" of the library cannot be determined or measured in quantitative terms. In other words, merely the number of volumes in the collection gives no insight into the worth of the library to the programs of the college or university.

The fact that it is extremely difficult, if not impossible, to draw qualitative conclusions from quantified data does not diminish the need for officials involved in the budgeting process--both at the institutional level and at the state level--to make decisions as to the resources to be provided for libraries. When standards are not developed in quantitative terms, the budgeting and appropriating authorities, who cannot avoid quantitative bases for their decisions, are compelled to adopt measures which, though perhaps having the virtue of simplicity, may be essentially irrelevant.[1] It is therefore necessary to develop budgetary guidelines for these authorities which will still retain the virtue of simplicity but which will also be relevant to the programs of the institutions involved.

The need for an analysis system for higher education libraries in the State of Washington was emphasized when, in early 1967, the Central Budget Agency requested that the institutions reach agreements on budgetary models or analytic guidelines for the major operating programs prior to the review of 1969-71 institutional budget requests. The development of the analysis system for Program 05 was assigned to the Office of Interinstitutional Business Studies in October, 1967. Agreement on the system for this program marks the third major program covered by interinstitutional budgetary agreement.

The system includes the following components:

- A Library Resources Formula which takes into account both enrollment and program factors and is similar to the approach developed by Clapp and Jordan;[2]

- Staffing formulas which relate public service staff to the demands for service and the technical processes staff to the materials which require processing and which compare the Washington libraries to those in the University of California System;

- A minimum percentage increase factor for acquisitions and, for formula purposes, a maximum percentage limitation on weeding;

- Procedures for converting resource and manpower requirements into dollars which allow for changing market conditions; and

- Procedures for computing binding and other operational costs.

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[1] V. W. Clapp and R. T. Jordan, "Quantitative Criteria for Adequacy of Academic Library Collections," College and Research Libraries, Sept. 1965, pp. 371-372.

[2] Ibid.

The proposed system relates closely to the long range planning process since it enables each institution to estimate its requirements for future library resources and staffing once the factors of student enrollment, faculty staffing and graduate programs have been determined for any given year. For example, the system emphasizes the need for preplanning in the area of graduate programming since the allowance per graduate field is intended to apply as soon as the program has received presidential approval. This is necessary in order to develop the resources required in advance of actual implementation of the program.

It should not be inferred that the formulas used in the analysis system are optimum in nature. The resources formula is drawn from an approach designed to measure "threshold" adequacy and the staffing formulas relate to the actual experience of the libraries in the University of California System. Neither should it be inferred that achieving 100 per cent of the formulas will automatically insure quality. No formula, or series of guidelines or models, can accomplish this. Quality is the responsibility of the librarian and the institution in the proper selection and retention of materials to best support the operating programs of the institution.

III. Methodology

The development of the analysis system started with a review of basic premises in January, 1968 with the Interinstitutional Committee of Business Officers. Each library was then surveyed for basic data and the premises were discussed with each librarian. Several modifications resulted from this process as the variations in data interpretation, size, and scope and operating approach of the libraries became evident. As a result of these inquiries and a review of available literature in the field, it was decided to keep the guidelines on as gross a basis as possible with emphasis on determining modular figures for the three main facets of the library program: (a) the acquisition of library resources, (b) the technical processing of those resources, and (c) the services to the public using those resources.

A meeting was held in May, 1968 with the Academic Administrators in which recommendations for the shape of the system were outlined. As a result of that meeting, investigation was concentrated on the holdings of the institutions in terms of "units of library resources,"* the applicability of the Clapp and Jordan approach for determining minimum levels of holdings, and the relevance of the University of California System staffing formulas to the Washington institutions. Additional data were collected from the libraries and the definitions and guidelines were reviewed with the librarians. California and Oregon library and budget personnel were also contacted for additional data.

The proposed formulas were developed and discussed with each institution and reviewed with the Washington Higher Education Library Committee in September, 1968. Additional revisions were made as a result of that review but the basic assumptions remained unchanged. Following a final review at a joint meeting of the Academic Administrators and the Business Officers, the budget analysis system was adopted by the Council of Presidents in October, 1968. The system was then incorporated into the 1969-71 biennial budget request of each institution and was subsequently used by the Executive Budget Office and the Legislature in their review of those requests.

At the same time, a survey of the library holdings of twenty-five colleges and universities on the basis of the definitions used in the library resources formula was conducted. These institutions, ranging in size from over 40,000 to under 4,000 students, are located in the seven states used by the Washington institutions for faculty salary comparisons. The survey was intended to test the credibility of the formula and its applicability to a variety of institutions outside the State of Washington. The results of this survey are contained in Appendix A.

The survey demonstrated that those institutions which are noted for their library collections exceeded 100 per cent of the resources formula. The remaining institutions, some with very large collections, fell far short of the minimal formula which had been adopted for use in this state. This is similar to the results experienced in the Clapp-Jordan review and may be indicative of a lack of coordination of library resource development with

*See Definitions, Section V.

expanding academic programs. As a result of this survey we concluded that the formula, although it is intended to provide for only threshold adequacy, was not so conservative that it cannot be useful over an extended period of time.

During the process of executive and legislative budget review, it became evident that several minor modifications in the system were required in the areas of definitions and procedures. Between June and September, 1969 meetings were held with the chief librarians and a Task Force of Definitions. Alternative analysis forms were prepared and reviewed with librarians, budget officers and executive and legislative analysts. Following a second meeting with the chief librarians in October, the system was revised to:

1. Exclude organized map collections and certain aspects of institutional archives;

2. Improve the calculation of binding unit costs;

3. Give weight to effort expended in weeding in calculating technical processes staff; and

4. Spread operations cost calculations over the entire biennium rather than one fiscal year.

These changes and the related analysis forms were reviewed with the Academic Administrators and the Business Officers and approved on November 18, 1969. After additional review by each institution, the revisions were approved by the Council of Presidents in February, 1970.

IV. Agreements and Supporting Detail

A. The analysis system covers all aspects of Program 05 with the following exceptions: collections, staffing and expense related to laboratory school libraries at Eastern and Central Washington State Colleges; the Law and Health Sciences libraries at the University of Washington; Agricultural and Industrial Research libraries at Washington State University; audio-visual programs, curriculum laboratories, closed-circuit television, organized and serviced map collections and those aspects of an archives which deal solely with an institution's history, organized collections of personal or official papers or records management. In addition, nonrecurring conversion programs, self-sustaining activities and nonlibrary functions are excluded.

It is necessary to limit the scope of an interinstitutional system of analysis to those elements which can be uniformly defined, quantified, and related to factors common to all institutions. The activities outlined above fall outside this definition. The various collections excluded are unique in nature and are subject to special factors of demand uncommon to the majority of holdings. The activities excluded vary widely from campus to campus and are not in all cases included in Program 05. Nonrecurring conversion activities are excluded by their very nature and in recognition of the fact that the formulas should not hamper the development of improved methods of operation.

B. The following formula shall be used for determining minimum quantitative adequacy of holdings of library resources:

1.	Basic or Opening Day Collection	85,000 Units of Library Resources*
2.	Allowance per F.T.E. Faculty*	100 Units of Library Resources
3.	Allowance per F.T.E. Student	15 Units of Library Resources
4.	Allowance per Masters Field* When No Doctorate Offered in Field	6,100 Units of Library Resources
5.	Allowance per Masters Field* When Doctorate Is Offered in Field	3,050 Units of Library Resources
6.	Allowance per Doctoral Field*	24,500 Units of Library Resources

The proposed formula is based on the approach developed by Verner W. Clapp and Robert T. Jordan and published in the September, 1965 issue of "College and Research Libraries." Through this approach it is possible to develop a single formula which is applicable to both the colleges and universities, since it takes into account both enrollment and program factors. Two of the elements used by Clapp and Jordan are not included in the formula which was adopted. These were an allowance of 335 volumes per "undergraduate major" and twelve volumes per "honors student." Both of these elements are subject to such a wide variation of interpretation as to make their interinstitutional use extremely questionable.

As outlined in Section III, the Clapp-Jordan approach was recommended to the Academic Administrators in May, 1968. In the meetings with the librarians which followed, general agreement was achieved. Questionable

*See Section V, Definitions.

areas were the basic collection and the allowance per masters degree field. These areas were next reviewed in detail prior to arriving at the recommended formula.

In the case of the basic, or opening day, collection, the librarians were in agreement that the amount (50,750 volumes) used by Clapp and Jordan was too low. Their suggestions ranged from between 70,000 and 80,000 up to over 100,000 volumes. A review of the Clapp-Jordan justification also indicated that this facet of their formula was considerably understated. In their article, they used the 1964 Michigan undergraduate list of 56,550 separate titles and the 1965 California Library Council list of 55,000 titles as support for their calculations. Their formula, however, only allows 35,000 titles, approximately 60 per cent of the supporting data.

The 55,000 titles included in the California list formed a basis of the total of 75,000 volumes approved by their legislature for opening day collections at each of the three new campuses of the University of California. With the growth of knowledge and the consequent increase in published materials since 1964-65, it is reasonable to assume that the above lists would now be augmented by additional titles requiring at least 5,000 additional volumes. The recommended opening day collection of 85,000 units of library resources also includes 5,000 units related to a core of undergraduate majors. As noted above, this factor was not included in the recommended system due to definitional problems.

The next aspect reviewed was the per student allowance. Clapp and Jordan had recommended twelve volumes per student with an additional allowance of twelve volumes per honors student. The recommended weighting of fifteen volumes per student is a result of taking the twelve as suggested, adding one unit per student to partially replace the allowance per undergraduate major factor and two per student due to deletion of the allowance per honors student factor.

The allowance per masters degree field was also reviewed carefully. All librarians contacted indicated that the amount seemed disproportionately low. It was felt, however, that in the light of all of the other factors, the suggested allowance would meet the criterion of "threshold adequacy" except in those fields where the masters is the highest degree offered. The increased weighting recommended for these fields is intended to partially compensate for the absence of the resources available to masters students in fields in which the doctorate is also offered at the institution.

No revisions were made in the allowance of 100 units per f.t.e. faculty and 24,500 units per doctoral field which were suggested by Clapp and Jordan. The application of the Library Resources Formula to each institution is shown on Table A on the following page.

C. A minimum number of acquisitions per year shall be established equal to five per cent of the estimated number of units of library resources held at the start of each fiscal year.

This factor is intended to serve as a "floor factor" and would come into effect when 100 per cent of formula was reached and the institution's growth in enrollment or programs would allow for an increase of less than the five

TABLE A

APPLICATION OF THE LIBRARY RESOURCES FORMULA 1968-69

	U. W.		W. S. U.	
-Basic Collection @ 85,000	(1)	85,000	(1)	85,000
-Per F.T.E. Faculty* @ 100	(1,510.1)	151,011	(781.73)	78,173
-Per F.T.E. Student @ 15	(26,980.0)	404,700	(11,861.5)	177,923
-Per Masters Field No Doctorate @ 6100	(10)	61,000	(27)	164,700
-Per Masters Field with Doctorate @ 3050	(46)	140,300	(29)	88,450
-Per Doctoral Field @ 24,500	(48)	1,176,000	(35)	857,500
Total Formula		2,019,091		1,451,746
Current Holdings		1,512,009		898,474
Percentage		74.9%		61.9%

	E. W. S. C.		C. W. S. C.		W. W. S. C.	
-Basic Collection @ 85,000	(1)	85,000	(1)	85,000	(1)	85,000
-Per F.T.E. Faculty* @ 100	(261.97)	26,197	(332.22)	33,222	(373.25)	37,325
-Per F.T.E. Student @ 15	(5367.5)	80,512	(6395.0)	95,925	(7267.4)	109,011
-Per Masters Field No Doctorate @ 6100	(11)	67,100	(10)	61,000	(15)	91,500
Total Formula		258,809		275,147		322,836
Current Holdings		167,644		168,306		203,257
Percentage		64.8%		61.1%		63.0%

*Includes ranked faculty only.

per cent. This minimum would allow for the continuation of existing obligations and for acquisition of a portion of new materials published.

D. Anticipated deletions from the collection shall be based on the percentage ratio of deletions to total holdings experienced in the most recent actual year up to a maximum of three per cent per year.

This recommendation is intended to provide a standard procedure for estimating reductions in collection size due to weeding, losses, etc. The maximum limitation, for formula purposes, is included in order to assure officials involved in the budgetary review and appropriations process that this activity will have only a limited effect on an institution's formula position. The three per cent, in all cases, allows for continuation of current levels of weeding.

E. The following formulas for determining total man years of staffing shall be used in the analysis system:

1. Public Services (Including a pro rata share of library administration)
Using the revised definition of f.t.e. students, weight

100/200	level f.t.e. students at 1.00
300/400	level f.t.e. students at 1.80
500	level f.t.e. students at 4.30
600/700	level f.t.e. students at 6.00
Registered outside users*	at 1.00

Determine the total weighted enrollment and divide by a factor of 220 to derive F.T.E. Formula Public Services Staff.

2. Technical Processes Staff (Including a pro rata share of library administration).

Add the number of units of library resources estimated to be added in the year to which the calculation applies, to the total units held at the beginning of that year plus the number of units estimated to be deleted. Multiply that figure by the units to be added and deleted and divide by 1,000,000 to derive "Weighted Units to be Processed." Multiply the Weighted Units to be Processed by the following factors and add the following constants:

1 to 14,999 WUP	Multiply by .01514	and add 67
15,000 to 41,999 WUP	Multiply by .00664	and add 194
42,000 to 300,000 WUP	Multiply by .00360	and add 322

Divide the Weighted Units to be Processed by the factor resulting from the above calculation to derive F.T.E. Formual Technical Processes Staff.

3. All Staffing comparisons are to be made in terms of the total f.t.e. staff generated by the above formulas.

As was indicated in Section III, the University of California System approach to budgeting for library staff was selected to serve as the basis for this portion of the analysis system after

*See Section V, Definitions.

review and discussion with Washington librarians. This approach, which has been in use since 1964, takes into account the prime variables affecting staffing. In technical processes, the approach assumes that it becomes progressively more difficult to process materials as the size of the collection increases. It also assumes that this is partially offset by economies of scale which occur as the size increases. In public services, the assumption is made that demand on library resources increases as the level of the student's program increases. Since the University of California includes institutions of varying size which are both smaller than and as large as the Washington institutions, it was determined that their experience, if applicable, could serve as a guideline for the analysis system.

a. Public Services. The University of California System experience indicated that institutional public services staff (including a pro rata share of library administration) bore a relationship of one f.t.e. staff per 185 weighted users. The weightings used by the U.C. System are those of their staffing formula. Their approach is, however, based on the level of the student regardless of the courses taken. It was therefore necessary to convert the credit hour data provided by the Washington institutions into data by level of student and thereby determine the relationship of existing staffing levels to the California formula. These were then compared to the credit hour by course level computation using the weightings of the regular cost portion of the faculty staffing formula. Although a relationship to formula faculty might have been a more simple device, the variation in terms of high cost areas, which do not necessarily require more library resources, made this approach inappropriate. After the relationships between the California weights and the staffing formula weights were determined, the relationship of 220 weighted users was found to be most consistent with the California experience.

b. Technical Processes. The University of California System experience for each institution for the last four years was used to develop straight-line linear relationships between weighted volumes added* and weighted volumes added per f.t.e. technical processes staff. These relationships were then plotted and breaking points determined.

The University of California Data did not include micro-materials, so it was necessary to develop a linear relationship which took these materials into account. Next, the Washington data was also plotted. The pattern of the California institution's experience was sufficiently similar to the Washington institutions to warrant continued testing. The pattern referred to reflects economies of scale which can be anticipated as the collection grows. It was concluded that the California rate of scale economies would be assumed in our approach.

*The number of weighted units added is derived by multiplying units added by the size of the collection and dividing by a uniform number--in this case the divisor is 1,000,000.

TABLE B

APPLICATION OF THE RECOMMENDED STAFFING FORMULAS - 1968-69

		UW	WSU	EWSC	CWSC	WWSC
I	Public Services*					
	Number of Weighted Users	50,561.0	18,799.0	7761.4	9480.1	10,517.2
	Formula	÷220	÷220	÷220	÷220	÷220
	F.T.E. Formula Staff	230.0	85.45	35.30	43.09	47.80
II	Technical Processes*					
	Ending Collection	1,512,009	898,474	167,644	168,306	205,829
	Units Added in Year	101,844	65,311	10,274	32,840	29,880
	Units Deleted in Year	3,672	1,954	1,754	6,639	1,996
	Wtd. Units Processed	159,541	60,436	1,722	6,644.5	6,561
	Wtd. Units Processed per F.T.E.	÷896.0	÷539.57	÷93	÷167.6	÷176.3
	F.T.E. Formula Staff	178.0	112.00	18.5	39.64	37.20
III	Total Formula F.T.E.	408.00	197.45	53.80	82.73	85.00
	Actual Staff F.T.E.	329.26	121.93	38.00	46.00	50.79
	Percentage	80.7%	61.8%	70.6%	55.6%	60.0%

*Including proportionate share of library administration.

To determine the level of the formula, a variety of tests was used. First, the nonmicroform materials were deleted from the Washington data and results compared to the U.C. formula. The California data were also adjusted by estimates of micro-materials and plotted with the Washington data. The result of these comparisons was the development of a pattern which relates the Washington institutions to the University of California experience pattern as adjusted for the inclusion of micro-materials.

Further study during 1969 indicated that the formula made no provision for the processing effort involved in weeding of the collections. In order to allow for this desirable function it was determined to give the same weight to materials removed from the collection as was given to materials added. This modification changed the terminology used from "Weighted Units Added" to "Weighted Units Processed."

c. Comparisons on a Combined Basis. There are positions in each library whose responsibilities cover both public services and technical processes. Since the division of their time is a matter of judgment, a comparison of actual staff f.t.e. to formula f.t.e. for only one area is of limited use. The sum of formula f.t.e. in both areas is, however, suitable for comparison to total actual, or requested, f.t.e. staff. The application of the staffing formulas to each institution is shown on Table B on the preceding page.

F. When computing the man years of work-study student workers, only the man years attributable to the nonfederal portion of their cost shall be included for formula purposes.

The staffing formulas are based on relating the position of the Washington institutions to the experience of the University of California system. It is their practice to count only the hours attributable to the nonfederal portion of this cost. Adoption of this approach allows for consistency in treatment and is in accord with the purpose of the federal program in that the federal portion will be treated as a supplement, rather than an offset, to regular staffing levels.

G. The unit acquisition cost of library materials shall be computed on the basis of each institution's actual experience in the most recent fiscal year plus anticipated price increases based on national price trend data.

In the eight years between 1959 and 1967, the average cost of books increased by over 50 per cent, the average price of periodicals increased by 63 per cent, and the average serial service cost rose by 68 per cent.[3]

There is no reason to believe that the cost of library materials will level off in the immediate future.

The analysis system is based upon determining the number of units of library resources to be added, and then converting those added units into dollar requirements. Unless an allowance is made for reasonable anticipated price increases, the number of units which can actually be acquired will usually

[3] Bowker Annual of Library and Book Trade Information, (1967), pp. 103-107.

be less than the number anticipated in the budget. National price trend data is used since this information offers an adequate time series for projection purposes and is not altered by short run changes in institutional purchasing practices. Indexes published annually in the Bowker Annual of Library and Book Trade Information adequately reflect the price patterns of U.S. publications which have the largest impact on Washington higher education libraries. These indexes, after excluding children's books, law and medicine, are used in the analysis system. The factors applicable to annual cost increases in 1969-71, based on statistical projections of this data, are five per cent per year for books and six per cent per year for periodicals and serials.

H. Continuing binding expenditures shall be estimated on the basis of the experienced relationship of binding to subscriptions as extended by the experienced unit cost of binding after adjustment for the same level of price increases as are assumed in Program 06.

The majority of bindery expense is related to subscriptions for periodicals and serials which require binding before they become "volumes." This relationship allows for increases in bindery expense commensurate with estimated increases in the units added from these sources.

I. Staffing costs shall be determined on the basis of the average man year cost as budgeted for the second year of the biennium as adjusted for requested percentage increases in salary and wage levels.

J. Other operations costs shall be computed on the basis of budgeted expenditures per man year as of the current biennium as adjusted for the same level of price increases as are assumed in Program 06.

Due to time limitations, no specific studies were made of staffing formulas in terms of the distribution between "professional," "nonprofessional," and "hourly" categories. Neither was it possible to give specific attention to the other nonresource and bindery objects of expenditure. Until such time as these studies can be undertaken, the budgeted costs per man year, as adjusted for salary, wage, and cost increases, are extended into the ensuing biennium.

V. Definitions for Purposes of the Program 05 Analysis System

A. F.T.E. Faculty: The sum of f.t.e. ranked formula faculty plus f.t.e. sub-faculty who are not graduate students budgeted in comparable areas of Program 06 minus adjustments for Law, at the University of Washington and plus adjustments for Agriculture and Veterinary Medicine at Washington State University.

B. Graduate Fields: The separate fields offered by each institution as set forth in the annual report of the Graduate Deans entitled "The Graduate Programs of the State Colleges and Universities of the State of Washington." Specializations within the field of education are not to be counted as "fields."

C. Registered Outside Users: Persons not connected with the institution who make sufficient regular use of the library so as to require registration or the issuance of a borrowers card or other identification.

D. Unit of Library Resources: (1) One volume as defined by and reported to the U.S. Office of Education in the annual Higher Education General Information Survey,* or (2) one reel of microfilm or eight micro-cards or microfiche as reported on the same survey.

* For reporting purposes, a volume is a physical unit of any printed, typewritten, handwritten, mimeographed, or processed work contained in one binding or portfolio, hardbound or paperbound, which has been classified, cataloged and/or otherwise prepared for use. Include bound periodical volumes. Include government documents that have been classified and cataloged, counting as a volume such material as is contained in one binding or portfolio.

The term "otherwise prepared for use" includes accessions which have not yet been cataloged but does not include a serial recording such as the government document classification system applied to documents which have not been accessed or cataloged. The listing of specific inclusions or exclusions from the comparable area count is as follows:

Exclude:

(1) Government documents which do not meet the definition of a volume as outlined above;

(2) College and university catalogs;

(3) Fragmentary or loose map collections;

(4) Pamphlets, clippings, unbound newspapers, loose music scores, paintings, prints, phonograph records, and tape recordings;

(5) Educational curricular materials, such as school texts, curriculum guides, kits and laboratoriali, film strips, records, units of study, circulating periodical collections for student teachers, book jackets, pictures, etc., which are not cataloged or accessed or otherwise meet the definition of a volume;

(6) Telephone books, trade catalogs and other ephemeral materials.

Include:

(1) Prints or plates in portfolio;

(2) Each copy of theses which are retained;

(3) Material which meets the definition of a volume which are housed in an archives and educational reference material or audio-visual reference books which meet the definition of a volume but which happen to be housed in a curricular lab or an AV section;

(4) Juvenile books if they are cataloged or accessed;

(5) Bound volumes of newspapers.

E. Nonrecurring Conversion Activities: Those major programs or projects which are designed to convert the operations of the library from one method to another during a certain period of time. Examples include: Converting to a computerized circulation system; Converting a Dewey Decimal system to the Library of Congress system, etc.

F. Units Acquired by Purchase: Those units of library resources acquired through expenditure of funds from any source within the institution.

G. Items Input to Binding: The number of periodical and serial units generated by subscriptions plus the number of previously added volumes which, in a given year, have deteriorated to the point of requiring rebinding or repair.

H. Units Added - Periodicals and Serials: The number of physical volumes generated by the total number of subscriptions in force regardless of whether the subscriptions are purchased or donated.

APPENDIX A

Results of a Survey of Library Resources and
Comparison with the Washington Resource Formula
1967-68
Twenty-five Public Colleges and Universities in Seven States

Institution	Area	Formula Units*	Units* Reported	Percentage
A	Mid West	2,807,175	3,996,645	142%
B	Mid West	3,185,217	3,946,826	124%
C	West Coast	3,109,815	3,395,102	109%
D	West Coast	2,169,411	2,289,988	106%
E	Mid West	273,170	219,800	80%
F	Mid West	206,220	163,863	80%
G	West Coast	1,218,725	957,277	79%
H	Mid West	502,540	393,835	78%
I	Mid West	697,690	539,230	77%
J	Mid West	525,600	383,216	73%
K	Mid West	208,380	144,652	69%
L	West Coast	343,980	236,041	69%
M	Mid West	3,550,000	2,367,695	67%
N	Mid West	2,825,100	1,871,692	66%
O	West Coast	306,380	196,796	64%
P	West Coast	402,415	248,319	62%
Q	Mid West	3,775,000	2,271,381	60%
R	West Coast	446,495	263,626	59%
S	Mid West	842,150	486,847	58%
T	West Coast	607,535	347,752	57%
U	Mid West	152,395	86,480	57%
V	West Coast	619,650	351,193	57%
W	Mid West	203,790	107,043	53%
X	Mid West	780,410	357,413	47%
Y	Mid West	191,015	86,246	45%
Totals		29,950,258	25,708,958	85.8% Average

Washington Institutions

EWSC	225,503	166,736	74%
UW	1,981,014	1,413,927	71%
WSU	1,359,316	833,163	61%
WWSC	292,765	178,738	61%
CWSC	253,027	140,408	56%
Totals	4,111,625	2,732,972	66.5% Average

*Unit of Library Resources: A volume as defined by and reported to the U. S. Office of Education in the annual Higher Education General Information Survey, one reel of microfilm or eight microcards or microfiche, as reported on the same survey.

SURVEY OF LIBRARY RESOURCES

Office of Interinstitutional Business Studies
Olympia, Washington 98501

Institution:_____ Date Prepared:_____

Name of Person Preparing Report:_____ Title:_____

It is important to note that the Library Resources Formula does not cover students, faculty, programs, or library holdings in the following areas: Colleges or Schools of Law, Medicine, Nursing, or Dentistry; campus Elementary Schools; Agricultural or Industrial Research or Federal Cooperative Extension Programs. Please exclude any data relating to these areas from your response.

I. Number of Budgeted F.T.E. Faculty, Fall, 1967

Exclusive of faculty in the areas noted above, include the full-time equivalency of all instructional faculty holding the rank of lecturer and above, plus Deans and Department Chairmen budgeted in your Instruction and Departmental Research Program for Fall, 1967. _____

II. Number of F.T.E. Students, Fall, 1967

A. Exclusive of hours in the areas noted above, divide the total student credit hours produced in courses which are termed "undergraduate" at your institution by 15.

SCH_____ ÷ 15 = F.T.E._____

Divide the credit hours produced in "graduate" courses by 10.

SCH_____ ÷ 10 = F.T.E._____

B. If your record system does not provide the data required in A, use this alternative:

Divide Student Credit Hours generated in Fall, 1967, by students not admitted to a program leading to a graduate degree, by 15.

SCH_____ ÷ 15 = F.T.E._____

Divide the credit hours generated by graduate students by 10.

SCH_____ ÷ 10 = F.T.E._____

TOTAL F.T.E._____

III. Graduate Fields, Fall, 1967

Exclusive of the area noted above:

A. The number of fields* in which a masters degree was offered in Fall, 1967, in which no doctorate was offered _____

B. The number of fields in which a masters degree was offered in Fall, 1967, in which a doctorate was also offered: _____

C. The number of fields in which a doctoral degree was offered in Fall, 1967: _____

* Do not treat the specializations within the field of education as separate fields.

IV. Library Resource Data

After excluding holdings relative to the areas noted above, list the following data from Part 1 of the Library Collection portion of the Higher Education General Information survey for 1967-68:

A. (Item 4) Total Number of Volumes Held at End of Year (1967-68): _____

B. (Item 5) Number of Reels of Microfilm Held at End of Year: _____

C. (Item 6) Number of Physical Units of Other Forms of Microtext Held at End of Year: _____

D. Divide C by 8: + 8 = _____

E. Units of Library Resources (A + B + D) _____

Check here if you wish the source of this data kept confidential: ____

Please return the completed survey to:

Mr. Denis J. Curry, Director
Office of Interinstitutional Business Studies
c/o The Evergreen State College
Olympia, Washington 98501

FORMULA COMPUTATION AND SELF RANKING FORM

(need not be returned)

A.	Basic Collection	1	x 85,000 =	
B.	F.T.E. Faculty (From I)		x 100 =	
C.	F.T.E. Students (From II)		x 15 =	
D.	Masters Fields with No Doctorate Offered in Same Field (From III-A)		x 6,100 =	
E.	Masters Fields with Doctorate Offered in Same Field (From III-C)		x 3,050 =	
F.	Doctoral Fields (From III-C)		x 24,500 =	

G. Total Formula Units

H. Actual Units Held (From IV-E)

Percentage of Formula (H ÷ G)

APPENDIX B

Operation of the System

A. Library Resources

Determine the input factors for each component of the formula for each year of the current and ensuing biennia as follows:

1. Basic Collection - Will always equal 1.

2. F.T.E. Faculty - From line IA1 of Form 06-1 for comparable areas, with adjustments deleting Law at the U.W. and adding Agriculture and Veterinary Medicine at W.S.U. and adding the f.t.e. of sub-faculty who are not graduate students.

3. F.T.E. Students - From Form 06-3 for comparable areas with the adjustments noted in 2 above. Divide lines IA and B by 15 and lines IC and D by 10.

4. Masters with No Doctorate in Same Field -
   Masters with Doctorate in Same Field -
   Doctoral Fields -

   Use the annual report of the Graduate Deans entitled "The Graduate Programs of the State Colleges and Universities of the State of Washington" as the source document for the first fiscal year of the biennium. Use only the data relative to fields and not that related to various specializations.

   For the second year of the biennium, add those fields which have been approved by the President of the institution for initiation in that year. For the ensuing biennium, add those fields which have been approved by the President of the institution for initiation in that biennium.

5. Convert the input amounts into units of library resources using the formula weightings. This will equal 100% of formula.

6. Contrast the actual number of units of library resources held by the institution for areas covered by the analysis system as of the end of the first year of the current biennium with the formula amount for that year and derive the actual percentage of formula.

7. Estimate the number of units which will be held at the end of the second year of the current biennium based upon funds budgeted for acquisition of library resources in the manner outlined on Form 05-5 (See Appendix C).

8. For the ensuing biennium decide upon the percentage of formula to be requested for each year of the biennium and the amount of additional resources to be added, after adjusting for estimated deletions. After determining the additional units to be added, the procedures outlined on Form 05-6 should be followed.

In both steps 7 and 8 it is necessary to convert the resources to be added into dollar requirements. Form 05-4 is designed to develop and project the unit cost of both subscriptions and other library resources. It is important to note that while all subscriptions are included in the unit cost calculation, only units acquired by purchase are included in the "Other Resources" category.

9. Binding Expenditures - In order to determine the binding requirements for the ensuing biennium, the experienced ratio of subscriptions to binding (See Form 05-8) is applied to the number of new subscriptions developed on Form 05-6. These amounts are converted into dollar requirements for each fiscal year through the extension of experienced unit costs.

B. Staffing

1. Public Services - From Form 06-3 for comparable areas list student credit hours by course level for each fiscal year with adjustments reflecting the exclusion of Law at the U.W. and including Agriculture and Veterinary Medicine at W.S.U. Divide the amounts in lines IA and B by 15 and lines IC and D by 10. Weight the f.t.e. students derived from this process by the formula amounts. Add registered outside users, with a weight of 1.0, in the same amount as existed in the applicable fiscal year. Assume continuation of the percentage relationship between outside users and other weighted users as exists in the second fiscal year of the biennium for all unknown years. Divide the total weighted users by 220 to equal formula f.t.e. staff.

2. Technical Processes - After determining the number of units added or to be added in each fiscal year, add that number to the units to be deleted, multiply that total by the total number of units actually held or estimated to be held at the end of that year and divide by 1,000,000. This will equal "Weighted Units Processed." Apply the relevant formula factor to derive weighted units processed per f.t.e. staff at 100% of formula. Divide the number of weighted units processed by weighted units processed per f.t.e. to equal f.t.e. staff at 100% of formula.

3. Total Staff - Add the results of B1 and B2 to equal total f.t.e. staff at 100% of formula. Contrast that amount with the f.t.e. staff as of the current biennium to determine current formula position. (Note: Hourly employees should be converted to man years by dividing total hours by 2080.) For the ensuing biennium multiply the result of the computations on Form 05-3 by the per cent of formula requested to determine total f.t.e. staff.

4. Multiply the total f.t.e. staff requested by the average man year cost budgeted in the second year of the current biennium as adjusted for percentage increases requested in salary and wage levels. (See Form 05-7)

5. Compute all other operations costs other than Staff Benefits on the basis of budgeted expenditures per man year as of the current biennium as adjusted for the same level of price increases as are assumed in Program 06 on a biennial basis. (See Form 05-8)

APPENDIX C

Forms Used in the Analysis System

FORM 05-1

BASIC BUDGET DATA

Date Prepared

Institution

☐ A. Gross Summary of Program 05
☐ B. Non-Comparable Element (Title)_____
☐ C. Summary of Comparable Areas

ITEM	Actual 19__ - 19__		Estimated 19__ - 19__		Requested 19__ - 19__		Requested 19__ - 19__	
	Man Years	Amount	Man Years	Amount	Man Years	Amount	Man Years	Amount
I. Salaries and Wages								
A. Professional								
B. Non-Professional								
C. Hourly								
Total Salaries & Wages								
II. Library Resources								
A. Periodicals & Serials								
B. All Other								
Total								
III. Binding								
IV. All Other Operations								
A. Object 02								
B. Object 03								
C. Object 04								
D. Object 05								
E. Object 06								
Total All Other Operations								
V. Staff Benefits								
VI. Recharges								
VII. Total								

OIBS: 12/1/69

FORM 05-2

Date Prepared

RESOURCES FORMULA COMPUTATION AND COMPARISON

Institution

1. ITEM	2. FORMULA	Actual 19___ - 19___		Estimated 19___ - 19___		Requested 19___ - 19___		Requested 19___ - 19___	
		3. Amount	4. Units	5. Amount	6. Units	7. Amount	8. Units	9. Amount	10. Units
1. Basic Collection	85,000	1		1		1		1	
2. Per FTE Faculty	100								
3. Per FTE Student	15								
4. Per Masters Field with No Doctorate	6,100								
5. Per Masters Field with Doctorate	3,050								
6. Per Doctoral Field	24,500								
7. Total Formula									
8. Total Holdings at end of Year									
9. Percentage (8÷7)									

1. In each year, the Amount Column multiplied by Formula (Column 2) = Units of Library Resources.
2. In line 8, derive Columns 4 and 6 from Form 05-5 and Columns 8 and 10 from Form 05-6.

FORM 05-3

STAFFING FORMULA COMPUTATION AND COMPARISON

Date Prepared

Institution

	Formula	Actual 19___ - 19___		Estimated 19___ - 19___		Requested 19___ - 19___		Requested 19___ - 19___	
		Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted
A. PUBLIC SERVICES									
1. Registered Outside Users	1.0								
2. 100/200 FTE Students	1.0								
3. 300/400 FTE Students	1.8								
4. 500 FTE Students	4.3								
5. 600/700 FTE Students	6.0								
6. Total									
7. Divisor	220		÷ 220		÷ 220		÷ 220		÷ 220
8. Formula Man Years	6÷7								
B. TECHNICAL PROCESSES									
1. Collection at end of year (05-2, Line 8)									
2. Units Added in Year (05-5 or 05-6)									
3. Units Deleted in Year (05-5 or 05-6)									
4. Weighted Units Processed $\frac{1x(2+3)}{1,000,000}$									
5. WUP per Man Year___+(Line 4x_____)=									
6. Formula Man Years (4÷5)									
C. Total Formula Man Years (A8 + B6)									
D. Actual or Requested Man Years									
E. Percentage (D÷C)									

1. The sum of items A-2, 3, 4, and 5 for columns 3, 5, 7, and 9 should equal the amount columns for line 3 of Form 05-2.
2. In item B-5, insert the applicable equation: 1 to 14,999 WUP -- 67 + (line 4 x .01514)
   15,000 to 41,999 WUP -- 194 + (line 4 x .00664)
   42,000 to 300,000 WUP -- 322 + (line 4 x .00360)

FORM 05-4

RESOURCE UNIT COST COMPUTATIONS

Date Prepared _____

Institution _____

A. Resources - Periodical and Serial Subscriptions

1. Number of subscriptions (including duplicates) at end of previous biennium _____
2. Number of Subscriptions at end of First Year Current Biennium _____
3. Increase _____
4. % of ___ ÷ 1 _____
5. Cost of Subscriptions in Effect at End of First Year Current Biennium _____
6. Cost per Subscription (Line 5 ÷ Line 2) _____
7. Cost Increase Factor (Plus 100%) _____
8. Est. Unit Subscription Cost, Second Year (6 x 7) _____
9. Est. Unit Subscription Cost, First Year Ensuing Biennium (8 x 7) _____
10. Est. Unit Subscription Cost, Second Year Ensuing Biennium (9 x 7) _____

B. Resources - Other

1. Units Acquired by Purchase in First Year Current Biennium _____
2. Expenditures for Above Units (Exclude Preprocessing Costs, if any) _____
3. Experienced Unit Cost _____
4. Cost Increase Factor (Plus 100%) _____
5. Est. Unit Cost, Second Year Current Biennium (3 x 4) _____
6. Est. Unit Cost, First Year Ensuing Biennium (4 x 5) _____
7. Est. Unit Cost, Second Year Ensuing Biennium (4 x 6) _____

FORM 05-5

CURRENT BIENNIUM LIBRARY RESOURCES DATA

Date Prepared _____

Institution _____

A. First Year Current Biennium 19___ to 19___

1. Units Held at Beginning of Year _____
2. Units deleted during Year _____
3. Percentage _____ %
4. Units Added During Year (to 05-3,B,2) _____
5. Units Held at End of Year (To Form 05-2, Line 8, Col. 4) _____

Distribution of Units Added

6. Units added in First Year from Subscriptions in Effect at End of Previous Biennium _____
7. Ratio (Line 05-4 A-1 = 1 Line 6 = _____ (Line 6 ÷ 05-4 A-1)
8. Units Added in First Year from New Subscrips. _____
9. Ratio (Line 05-4 A-3 = 1 Line 8 = _____ (Line 8 ÷ 05-4 A-3)
10. Other Units* of Library Resources Added _____
11. Percentage of 8 ÷ (8 + 10) _____ %
12. Total Units Added (6 + 8 + 10) _____

B. Second Year Current Biennium 19___ to 19___

1. Current Subscriptions (05-4 A 2) _____
2. Units from Current Subscriptions (Line 1 x Line A7) _____
3. New Subscriptions (Line 1 x 05-4 A4) _____
4. Units from New Subscriptions (Line 3 x Line A9) _____
5. Total Units - Periodicals & Serials (2 + 4) _____
6. Total Subscriptions (1 + 3) _____
7. Estimated Unit Cost of Subscriptions (05-4 A8) _____
8. Est. Expenditures for Subscriptions (6 x 7) _____
9. Total Amount Budgeted for Purchase of Library Resources _____
10. Available for Purchase of Other Library Resources (9 - 8) _____
11. Non-recurring Funds Available for Purchase of Library Resources (Explain Sources in Attachment) _____
12. Est. Expenditures for Other Resources (10 + 11) _____
13. Estimated Unit Cost (From 05-4, B-5) _____
14. Other Resources to be Added (12 ÷ 13) _____
15. Total Resources to be Added (5 + 14) _____
16. Units Held at Beginning of Year (Line A-5) _____
17. Estimated Units to be Deleted (Line 16 x Line A-3 - up to 3.0%) _____
18. Est. Units at End of Year (15 + 16 - 17) (To Form 05-2, Line 8, Col. 6) _____

* As used in these forms "other units" means all units of library resources other than those from periodicals and serials.

FORM 05-6

ENSUING BIENNIUM - LIBRARY RESOURCES DATA

Date Prepared

Institution

A. First Year Ensuing Biennium 19___ - 19___

1. Collection Size Requested (Form 05-2) _____
2. Collection at End of Previous Year (05-2) _____
3. Net Increase Requested (1-2) _____
4. Replacement Units (Line 2 x Line A3 of Form 05-5 up to 3.0%) + _____
5. Total Units Requested (3+4) (To Form 05-3, B, 2) _____
6. Subscriptions in effect at start of year (05-5, B, 6) _____
7. Units from Existing Subscriptions (Line 6 x 05-5, A, 7) _____
8. Subtotal (Line 5 - Line 7) _____
9. Estimated Units from New Subcriptions (Line 8 x 05-5, A, 11) _____
10. Estimated New Subscriptions (Line 9 ÷ 05-5, A, 9) _____
11. Total P & S Units (Line 7 + Line 9) _____
12. Total Subscriptions (Line 6 + Line 10) _____

Cost Computation

13. Est. Subscription Unit Cost (05-4, A, 9) _____
14. Cost of Subscriptions (12 x 13) _____
15. Other Units of Library Resources (Line 5 - Line 11) _____
16. Unit Cost (05-4, B6) _____
17. Total Cost of Other Units (15 x 16) _____
18. Total Cost of Library Resources (14 + 17) _____

B. Second Year Ensuing Biennium 19___ - 19___

1. Collection Size Requested (Form 05-2) _____
2. Collection at End of Previous Year (05-2) _____
3. Net Increase Requested (1-2) _____
4. Replacement Units (Line 2 x Line A3 of Form 05-5 to 3.0%) + _____
5. Total Units Requested (3+4) (To Form 05-3, B, 2) _____
6. Subscriptions in effect at start of year (05-6, A, 12) _____
7. Units from Existing Subscriptions (Line 6 x 05-5, A, 7) _____
8. Subtotal (Line 5 - 7) _____
9. Estimated Units from New Subscriptions (Line 8 x 05-5, A, 11) _____
10. Estimated New Subscriptions (Line 9 ÷ 05-5, A, 9) _____
11. Total P & S Units (Line 7 + Line 9) _____
12. Total Subscriptions (Line 6 + Line 10) _____

Cost Computation

13. Est. Subscription Unit Cost (05-4, A, 10) _____
14. Cost of Subscriptions (12 x 13) _____
15. Other Units of Library Resources Line 5 - Line 11) _____
16. Unit Cost (05-4, B7) _____
17. Total Cost of Other Units (15 x 16) _____
18. Total Cost of Library Resources (14 + 17) _____

FORM 05-7

COMPUTATION OF STAFFING DATA

Date Prepared

Institution

ITEM	PROFESSIONAL	NON PROFESSIONAL	HOURLY	TOTAL
Second Year Current Biennium 19 - 19				
1. Amount Budgeted for Salaries and Wages				
2. Man Years Budgeted				
3. Average Man Year Cost (1 ÷ 2)				
First Year Ensuing Biennium 19 - 19				
4. Salary Increase Percentage Requested				X X X X X X X X X
5. Adjusted Average Man Year Cost (Line 3 x (4+100%)				
6. Man Years Requested (From 05-3)				
7. Amount Requested (5 x 6)				
Second Year Ensuing Biennium 19 - 19				
8. Salary Increase Percentage Requested				X X X X X X X X X
9. Adjusted Average Man Year Cost (Line 5 x (8+100%)				
10. Man Years Requested (From 05-3)				
11. Amount Requested (9 x 10)				

FORM 05-8

COMPUTATION OF BINDING AND OPERATION'S COSTS

Date Prepared

Institution

A. Binding - Current Biennium

First Year

1. Subscriptions - End of Year (05-4, A-2) _____
2. Items Bound During Year _____
3. Line 2 ÷ 1 _____ %
4. Cost of Binding Above Items _____
5. Experienced Unit Cost (4 ÷ 2) _____

Second Year

6. Amount Budgeted for Binding _____
7. Adjusted Unit Cost (Line 5 x 10___%) _____
8. Items which will be bound (6 ÷ 7) _____

B. Binding - Ensuing Biennium

First Year

1. Number of Subscriptions, First Year (05-6, A-12) _____
2. Items to be Bound (Line 1 x percentage in Line A-3) _____
3. Adjusted Unit Cost (Line A-7 x 10___%) _____
4. Expenditures - Binding _____

Second Year

1. Number of Subscriptions, Second Year (05-6, B-12) _____
2. Items to be Bound (Line 1 x percentage in Line A-3) _____
3. Adjusted Unit Cost (Line B-3 x 10___%) _____
4. Expenditures - Binding _____

B. Operations Costs - Current and Ensuing Biennium

1. Operations Costs (Excluding Resources, Binding & Object 07) budgeted* in Current Biennium _____
2. Man Years Budgeted, Current Biennium _____
3. Operations Costs per Man Year (1 ÷ 2) _____
4. Cost Increase Factor, Ensuing Biennium _____
5. Operations Costs/MY, Ensuing Biennium (3 x 4) _____
6. Man Years Requested, Ensuing Biennium (05-7, Line 6 + Line 10) _____
7. Operations Costs, Ensuing Biennium (5 x 6) _____
8. Amount Planning for First Year (_____)
9. Amount Planned for Second Year (_____)

* Budget as last adjusted

FORMULA AND COST APPROXIMATION FORM

COMPARABLE AREAS - PROGRAM 050

	19__ to 19__		19__ to 19__		19__ to 19__		19__ to 19__	
1. Total Resource Formula (100%)								
2. Holdings - end of year		(%)		(%)		(%)		(%)
3. Replacements plus Weeding								
4. Units Processed (Dif. in 2) + 3								
5. Wtd units Processed $\frac{2 \times 4}{1{,}000{,}000}$								
6. WU P/MY (_____ + line 5 x _____)								
7. Formula TS man years (5 ÷ 6)								
8. Formula PS man years (05-3, line A-8								
9. Total Formula man years								
10. Budgeted or requested man years		(%)		(%)		(%)		(%)
COST APPROXIMATION								
1. Composite cost per unit added*								
2. Units added or to be Added	x		x		x		x	
3. Total Cost-Resources & Binding								
4. Composite cost per man year**								
5. Man years (line A-10)	x		x		x		x	
6. Total Cost - Staffing and Operations								
7. Transfers (Recharges)								
TOTAL - Comparable Areas (3 + 6 - 7)								
TOTAL - Non-Comparable Areas (From 05-1B)								
TOTAL - Program 050								

* Expenditures for Library Resources and Binding divided by units added.

** Salaries and Wages, all other Operations and Staff Benefits divided by man years.